

October 22, 2002

1009518
FF 16C
10/22/02

MEMORANDUM

TO: Doug Tanner
Regional Waste/Remediation Manager
Pocatello Regional Office

FROM: Michael Stambulis, P.E.
Staff Engineer, Process Engineering Group
State Office of Technical Services

SUBJECT: Technical Review of *Pond 8E Closure Plan (May 2002 Revision)*, *Pond 15S Closure Plan (May 2002 Revision)*, and *Phase IV Ponds Closure Plan (May 2002 Revision)*, FMC Idaho LLC, Pocatello

DISCUSSION

The U.S. Environmental Protection Agency (EPA) requested comments from the Idaho Department of Environmental Quality (Department) regarding three revised closure plans. The closure plans are for Pond 8E, Pond 15S, and the Phase IV ponds. These ponds are being closed in accordance with Resource Conservation and Recovery Act (RCRA) interim status requirements specified in Part 265 of Title 40 of the Code of Federal Regulations (40 CFR). The Department has the following comments/questions regarding the received sections of the closure plans.

Please note that the Technical Services Division at the Department was provided Sections 1, 2, 3, 6, 7, and 8 of the closure plans. Therefore, Technical Services personnel were unable to provide a complete technical review of the closure plans. Several of the following comments may be resolved within other sections of the closure plans not received by Technical Services.

- ✓ 1. In the executive summary and Section 6.6.1 of each plan, FMC requests an extended closure period for the ponds that would exceed the 180 day time frame specified by 40 CFR 265.113(b). FMC's request must include a time frame clarifying how long the proposed extension will last.
Section 6.6.7 Table w/ closure.
2. Section 6.6 within each plan describes 1 inch per year as the acceptable settlement rate for the subgrade. It is unclear how the 1 inch per year settlement rate was determined (i.e. site specific data, data from other field studies, etc.).
Section 7 of closure plan - geotech lab data - rate could obtain in 2-3 years
3. Section 7.2.2 within each plan states the cap subgrade will consist of two 6-inch layers of well-compacted sand. This statement is inconsistent; sand does not compact and will be transported through wind and water erosion. *bedding layer for geo synthetic on top of slag - 8E specification [8ES-14]*
- * 4. Section 7.3 of each plan proposes a 5% graded slope. This slope is too steep and will promote erosion of the cap. RCRA guidelines usually require a maximum surface gradient of 2% to 3%.
calculation for the erosion rate in document
5. Section 7.4.1 of the Pond 15S closure plan states, "Due to the presence of elemental phosphorous in the pond solids, extreme effort, special equipment, and non-standard procedures are required..." Please clarify if density tests per ASTM D 698 (Standard Test Method) can be used during the fill placement.
6. Section 8.6 within each plan states that pond solids will be stabilized by consolidation under the weight of the sand and slag backfill. However, the specific bearing capacity that the stabilized wastes will meet is not provided. Please clarify the specific bearing capacity of the stabilized wastes that will be sufficient to support the final cover. *driven by settlement and calculations*
7. Density testing per ASTM D 698 (Standard Test Method) of the exposed subgrade and pond subgrade (discussed in Sections 8.8.1 and 8.8.2 of each plan) is recommended to verify compaction to 90% of standard proctor is achieved. *wouldn't apply to slag material
total settlement off over life of cap.*

FILE COPY

FILE

MJS
EPA.DOC

G:\TECHNICAL SERVICES\PROCESS ENGINEERING\STAMBULIS\FMC\POND CLOSURE PLAN REVIEW FOR